

Work Order ID 120313

Wednesday, June 04, 2014 3:01:45 PM

120313

Page 1

Item ID: D3852-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Rib Assembly
Start Date: 6/04/14 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 6/04/14 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: MLJ Date: 14-06-06 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3852	Rev A								

100

0.00

100

Large Fab

Large Fab

Memo

0.00

Large Fab

1- pick D3166-3 to cut D3852-1 rib (LH) as per dwg D3852 using DT9440 jig

2- drill hole (3/16") in D3852-1 using DT9439 jig and open to finish size as per dwg D3852

3- c'sink hole as per dwg

4- remove identification markings

5- deburr

6- weld D3759-1 bushing as per dwg D3852

A/R ER316 S.S. Rod Batch: D1250541

7- grind bushing weld flush as per dwg dwg D3852

8- deburr hole if necessary

4X Dh 15/1/26CC 15-1-26

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00				<u>41</u>		DAS 43 9-89	JAN 27 2015
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				<u>41</u>		DAS 43 9-89	JAN 27 2015
150 *150* Packaging Packaging	Identify as per dwg & Stock Location: <u>WWA 04</u> Memo	0.00 0.00				<u>41</u>		DAS 43 9-89	JAN 27 2015

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Design									
Doc/Data									
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Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge		
☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other		

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

15-1-27

DQA: _____ Date: _____



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Training									
Transport									
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FAULT CATEGORY

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Picklist Print

Wednesday, June 04, 2014 3:01:45 PM

Page 1

Work Order ID: 120313

120313

Parent Item: D3852-041

D3852-041

Parent Item Name: Rib Assembly

Start Date: 6/04/14

Required Date: 6/04/14

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A 08-12-02 new issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3166-3 Manufactured No

100 Each 7.0000 0.18 1

D3166-3

Basket Hoop

Dh 15/1/26

Location

Loc Qty

Loc Code

WA

6

110228

6

WA004

1

97722

1

D3759-1 Manufactured No

100 Each 523.0000 1 4

D3759-1

Bushing

CC 15-1-26

Location

Loc Qty

Loc Code

WA004

523

106686

1

115657

71

116816

251

117768

200

B11744/9

(4x)

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

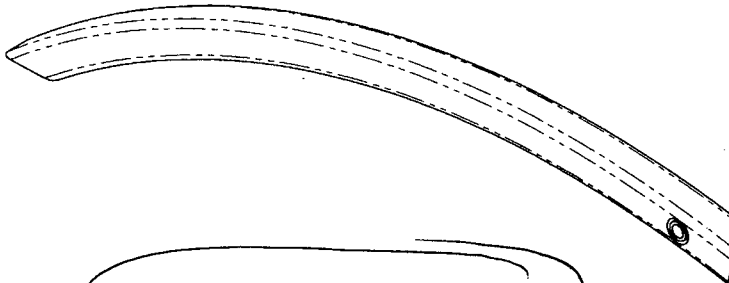
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Design											
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Handling/Pre											
Material											
Operator											
Offset/Setup											
Process											
Supplier											
Training											
Transport											
Unapproved											

FAULT CATEGORY							
Landing Gear		General					
☐ Bending	☐ Bend	☐ Folio/Program	☐ Outside Dimensions	☐ Pressure/Forced			
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Set-up			
☐ Cracks	☐ Broken/Damage/Defect	☐ Hardware	☐ Part Incorrect	☐ Temperature/Cure			
☐ Crimp/Kink/Ripple/Wave	☐ Burrs	☐ Inspection Incomplete/Unqualified	☐ Part Lost/Missing	☐ Weld			
☐ Cuffs	☐ Contamination	☐ Instructions Incomplete/Unclear	☐ Part Moved	☐ Wrong Stock Pulled			
☐ Crushing	☐ Countersink	☐ Misaligned/off center	☐ Positioned Wrong	☐ Other			
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Power Loss/Surge				
☐ Inspection Strip in Tube	☐ Drawing	☐ Misread					
☐ Marks/Chatter	☐ Drill Holes	☐ Off-set					
☐ Turning Sequence	☐ Finish	☐ Out of Calibration					
☐ Wave/Twist in Tube	☐ Fit/Function	☐ Out of Sequence					

ITEM	QTY -041	QTY -042	P/N	DESCRIPTION
1	X		D3852-041	RIB ASSEMBLY
2		X	D3852-042	RIB ASSEMBLY
3	1	1	D3759-1	BUSHING
4	1		D3852-1	RIB
5		1	D3852-2	RIB



D3852-041 RIB ASSEMBLY



D3852-042 RIB ASSEMBLY

SHOP COPY
RETURN TO:
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 120315 MLS

14-06-06

RELEASED
08/11/16 NWP

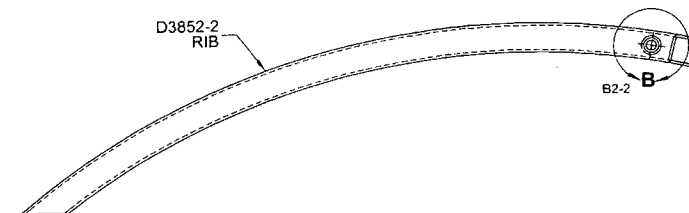
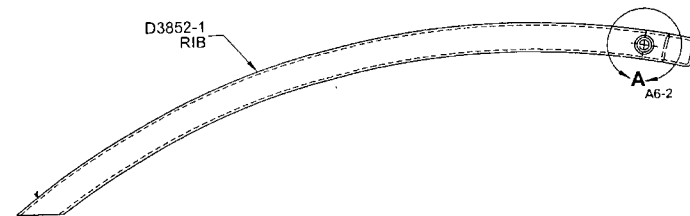
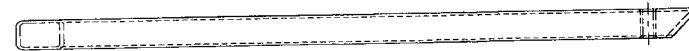
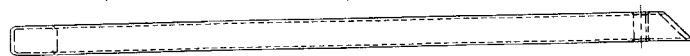
- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.83 lbs EACH
 - 8) WELDING: PER QSI 004

A	NEW ISSUE	MB	08.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.11.07		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

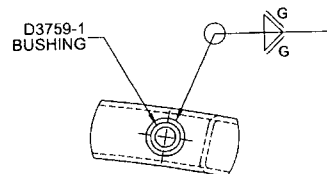
DRAWING NO. **D3852** REV. A
SHEET 1 OF 3
TITLE **RIB ASSEMBLY** SCALE NTS

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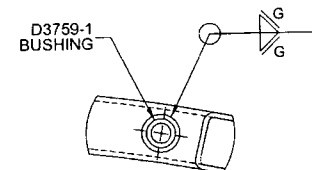


D3852-041 RIB ASSEMBLY

D3852-042 RIB ASSEMBLY



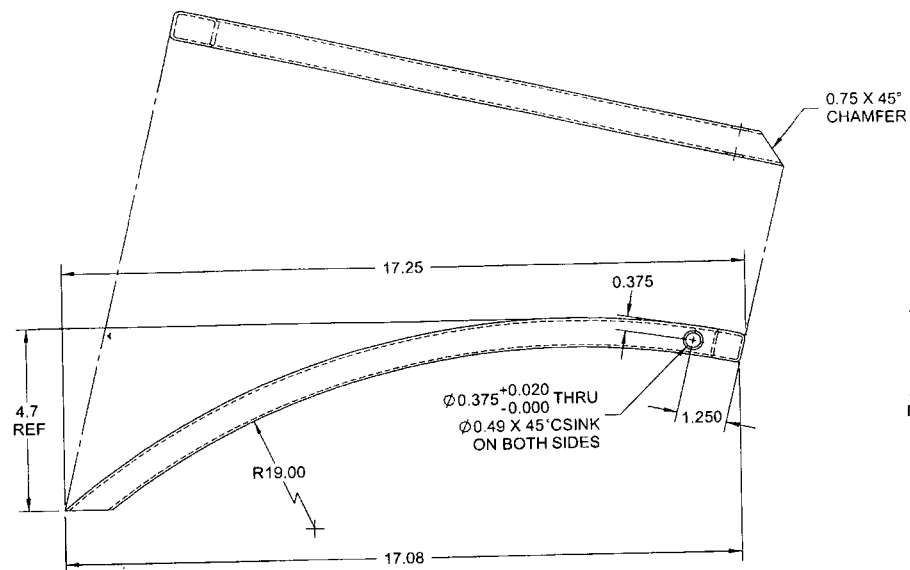
DETAIL A
SCALE 2X C5-2



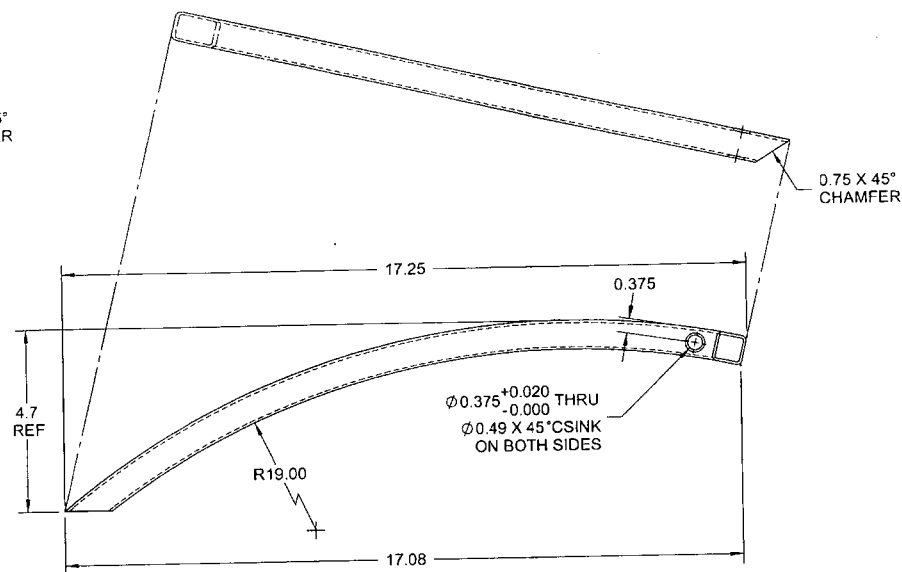
DETAIL B
SCALE 2X C2-2

RELEASED
08/11/07

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	125	DRAWING NO.	REV. A
MFG. APPR.		D3852	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		RIB ASSEMBLY	NTS
DATE	08.11.07	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR TRANSMITTED TO ANY OTHER PERSONS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	



D3852-1 RIB



D3852-2 RIB

RELEASED
08/11/18

- NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.065 WALL
REF. DART SPEC. M304TS0.750W0.065
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.82 lbs EACH

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D3852	SHEET 3 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	RIB ASSEMBLY	NTS
DATE	08.11.07	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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